# **Draft Compatibility Determination**

#### Title:

Construction Right of Way for the Butte City Bridge expansion

## **Refuge:**

Sacramento River National Wildlife Refuge

# **Refuge Use Category:**

Rights of Way

# **Refuge Use Type(s):**

Rights of Way (Road)

Material Staging

# Establishing and Acquisition Authorities and Refuge Purpose(s):

## Establishing and Acquisition Authority(ies):

Sacramento River National Wildlife Refuge (Refuge) was established in 1989. Legal authorities used for establishment of the Refuge include: the Endangered Species Act of 1973 as amended (16 U.S.C. 1531-1543: 87 Statute 884), the Emergency Wetlands Resources Act of 1986 (16 U.S.C. 3901(b) and the Fish and Wildlife Act of 1956 (16 U.S.C. 742).

### **Refuge Purpose(s):**

Sacramento River Refuge purposes include:

- "... to conserve (A) fish or wildlife which are listed as endangered species or threatened species .... or (B) plants ..." 16 U.S.C. Sec. 1534 (Endangered Species Act of 1973)
- ".. the conservation of the wetlands of the Nation in order to maintain the public benefits they provide and to help fulfill international obligations contained in various migratory bird treaties and conventions ..."16 U.S.C. 3901(b) (Emergency Wetlands Resources Act of 1986)
- "... for the development, advancement, management, conservation, and protection of fish and wildlife resources ..." 16 U.S.C. 742f (a) (4) "... for the benefit of the United States Fish and Wildlife Service, in performing its activities and services. Such acceptance may be subject to the terms of any restrictive or affirmative covenant, or condition of servitude ..." 16 U.S.C. Sec. 742f (b) (1) (Fish and Wildlife Act of 1956)

#### **NWRS Mission:**

The mission of the System is to administer a national network of lands and waters for the conservation, management, and where appropriate, restoration of the fish, wildlife, and plant resources and their habitats within the United States for the benefit of present and future generations of Americans (Pub. L. 105-57; 111 Stat. 1252)

## **Description of Use:**

#### What is the use:

The Fish and Wildlife Service (Service) proposes to issue a Right of Way permit to the California Department of Transportation (Caltrans). The Right of Way permit would allow Caltrans to (1) realign the Butte City Bridge and viaduct to meet safety standards on 5.73 acres of refuge land, and (2) use 4.07 acres of refuge land for a temporary material and construction staging for the bridge realignment project.

#### Where would the use be conducted:

The use would be conducted on the north side of State Highway 162, adjacent to the existing Butte City Bridge and viaduct. The viaduct divides the Sul Norte and Codora Units of the Refuge. See Figure 1.

#### When would the use be conducted:

The use would be allowed year round in accordance with construction scheduling for the Butte City Bridge project.

#### How would the use be conducted:

The Right of Way would allow Caltrans to proceed with replacing the Butte City Bridge and viaduct. Caltrans will implement all of the best management practices, mitigation and avoidance measures listed in the Butte City Bridge Project Initial Study with Mitigated Negative Declaration/Section 4(f) De Minimis Determination to minimize effects on listed species and for the project to result in no net loss of habitat. Caltrans will maintain public access to the parking lot at the Sul Norte unit of SRNWR and will maintain an access route for foot traffic from the Sul Norte parking lot to the Sul Norte and Codora Units. All gates will be closed and locked after entering or exiting. If for some reason a gate needs to be left open, Caltrans will have a person stationed at the gate to prevent unauthorized access. After construction activities have been completed, the temporary easement (staging area) would be restored to pre-project conditions and include our newly aligned refuge access road. Caltrans is working with California State Parks to transfer approximately 22 acres of state land to the Sacramento River NWR in exchange for the 5.73 acres of refuge lands where we will realign the Butte City Bridge. This state parcel is immediately adjacent to the Sul Norte and Codora Units of the refuge and 4 acres will be restored to native vegetation prior to transfer; 5 acres of the parcel has been previously restored to native riparian habitat and the remaining 13 acres will remain as annual grassland and include our newly aligned refuge access road.

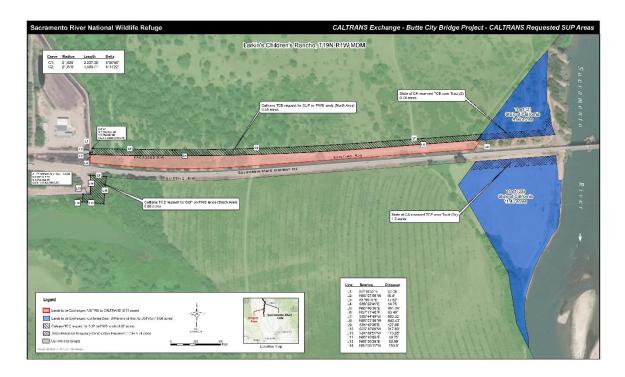


Figure 1. Right of Way Location

#### Why would the use be conducted:

Butte City Bridge is a critical transportation route across the Sacramento River. The 1948 bridge along with the 1961 lengthened viaduct segment were each designed for a 50-year service life and are now both beyond their expected service lives. A recent structural evaluation deemed the steel bridge seismically vulnerable due to section loss in the pilings at several piers and truss members of the bridge superstructure. Seismically, the potential for significant liquefaction exists within the subsurface material that supports the steel bridge and viaduct segments. In addition to seismic issues, instability for scour depths can occur during a 100-year flood event. Finally, the viaduct concrete girders are exhibiting signs of distress due to insufficient shear capacity. Complete closure of the bridge during construction would cause significant hardship to the public and would reduce the number of visitors to the Refuge. Refuge staff use this bridge and virtually all visitors to the Codora or Sul Norte Units coming from Chico and other areas on the east side of the Sacramento Valley use this bridge to access the units below the bridge. Therefore, to meet safety standards and public transportation needs, the Butte City Bridge must be realigned and constructed slightly to the north of the existing bridge.

## **Resources:**

The only resources required for the implementation of the ROW is in the form of Refuge Staff time to administer the ROW and oversee compliance, participate in the discussions regarding restoration of the temporary staging area and the parcel to be transferred, and FWS Realty Staff time to assist with the land transfer. The value of the staff time is estimated to be \$40,000. Existing resources are adequate to administer the special use permit and right of way.

## **Impacts:**

Caltrans prepared the *Butte City Bridge Project Initial Study with Mitigated Negative Declaration/Section* 4(f) De Minimis Determination in April 2019, which is incorporated by reference (Caltrans 2019). It outlines the expected project impacts natural and physical resources such as special status species, wetlands, wildlife, vegetation communities, and cultural resources. The Initial Study/Mitigated Negative Declaration contains measures to avoid, minimize, and mitigate impacts to these resources. These measures are incorporated into the project description. Impacts to the natural and cultural resources within the proposed right-of-way are described below.

#### Vegetation and Wildlife

The realignment of the Butte City Bridge would result in the permanent loss of 3 acres of volunteer oak woodland. The volunteer oak woodland consists of mostly smaller (less than 18 inch diameter) oak trees with an understory of non-native annual grasses and Himalayan Blackberry. The remaining 2.73 acres of land consists of a combination of weedy annual grassland and a paved access road. Habitat on the 4.07 acres of the temporary material and construction staging site is mostly a paved access road and non-native annual grasses. Construction activities that would affect wildlife include the loss of vegetation and construction related disturbance. Constructions activities that could adversely affect raptors and other birds nesting in vegetation within and adjacent to construction areas include above-ambient noise levels, visual impacts, and the removal of nesting and foraging habitat.

Potential impacts of construction noise on birds includes changes in the selection of foraging locations, interference with acoustic communications, failure to recognize other important biological signals such as sounds of predators and/or prey, increased stress, and/or altered steroid hormone levels or other physiological effects. Vegetation within the right-of-way provides limited habitat for wildlife species. This area likely supports primarily common, human and disturbance-adapted species. Therefore, the loss of this relatively low quality potential nesting habitat would not be likely to cause a substantial effect on local or regional populations of common, human and disturbance-adapted bird species. Construction related disturbance would be short-term. The permanent loss of 5.73 acres of volunteer oak woodland, non-native annual grasses, and a paved access road would not adversely affect Refuge purposes. The habitat that would be lost permanently is in a linear strip along the Butte City Bridge and would not materially interfere with the purpose of the refuge. As part of the project, the Service will exchange the 5.73 acres of the realigned bridge for approximately 22 acres of California State Park land that is riverine and following restoration, would contribute to Refuge purposes.

### **Threatened and Endangered Species**

Within the right-of-way there are a number of elderberry shrubs that could provide habitat for the valley elderberry longhorn beetle (VELB). Elderberry shrubs mapped within the right-of-way are in groups 1 and 3 (see Figure 9 in Caltrans 2019). All elderberry shrubs will be cut and the trimmings will be placed next to live elderberry plants in designated locations on the Codora or Sul Norte Units of the Refuge. This will allow any emerging beetle larvae access to a live elderberry shrub. In addition, Caltrans will purchase credits in a mitigation bank for the VELB. Caltrans and the Service completed Endangered Species Act section 7 consultation on June 6, 2018.

For the western yellow-billed cuckoo, habitat in the right-of-way is marginal foraging habitat. The loss of this habitat would not adversely affect this species.

#### Wetlands and Other Waters

In 2016, a preliminary delineation of wetlands and non-wetland waters was conducted in the project area. The overall project area extends beyond the right-of-way on Service property. The study delineated 0.113 acre of forested seasonal wetland and 7.773 acres of open water riverine (Sacramento River) within the project area. Neither forested seasonal wetland nor open water riverine are within the proposed right-of-way.

#### **Cultural Resources**

Identification efforts consisted of a records and literature search, pedestrian field survey, and consultation with local tribes and historical societies. Consultation included outreach to members of the Native American Community via letters and a series of follow-up phone calls. Studies did not identify any archaeological or historic resources in the project area. However, should unknown buried archaeological resources be discovered during ground disturbing activities during construction, work would stop until the significance of the archaeological resources can be determined.

#### Wildlife Dependent Recreation

Virtually all visitors to the Codora or Sul Norte Units coming from Chico and other areas on the east side of the Sacramento Valley use the Butte City Bridge to access the units below the bridge. Therefore, realignment of the right-of-way is essential to ensure uninterrupted access to wildlife dependent recreation on the Refuge and would further Refuge purposes. Caltrans would ensure safe public access to the Sul Norte and Codora Units throughout the construction period.

#### **Determination:**

#### **Determination Status:**

Compatible with Stipulations

# **Mandatory Re-evaluation Date:**

2031

### **Public Review and Comment:**

The draft compatibility determination will be available for public review for 15 days from March 24, 2021 to April 7, 2021. A hard copy will be posted at the Refuge Headquarters. It will also be made available electronically on the refuge website at: Concerns expressed during the public comment period will be addressed in the final compatibility determination.

## **Stipulations:**

- Caltrans will work with U.S. Fish and Wildlife Service realty staff to complete the land exchange prior to the completion of construction of the new bridge and viaduct.
- Caltrans will restore the land that is to be transferred to Refuge in accordance with the *Riparian Restoration Plan for Butte City Bridge Replacement Project*.
- All access roads and trails will be returned to prior condition upon completion of the project with
  the exception of the paved access road. The paved access road will have the asphalt removed, a
  portion realigned onto the temporary construction area and will be converted into a gravel road.
  Road will be a minimum width of 12 feet and will consist of a 6 inch layer of class II Aggregate
  Base.

- All temporary construction areas will be maintained free of non-native vegetation throughout the duration of the ROW permit.
- At the completion of construction, the temporary construction areas will be replanted with native grasses. Native grasses will be planted using a no-till seed drill at a minimum rate of 18 pounds per acre of live seed and will consist of a seed mixture with a minimum 5 lbs/ac Blue Wild Rye (*Elymus glaucus* Llano Seco ecotype), 4 lbs/ac Purple Needlegrass (*Stipa pulchra* Llano Seco ecotype), 4 lbs/ac Creeping Wild Rye (*Elemus triticoides* Yolo Bypass ecotype), and 5 lbs/ac Meadow Barley (*Hordeum brachyantherum* Yolo Bypass ecotype).

## **Justification:**

Granting the proposed right of way would not materially interfere with the purposes of the Refuge or the mission of the National Wildlife Refuge System. The existing viaduct that currently separates the two refuge units was built in 1961 with a 50-year service life (Caltrans 2019). It is thus past its service life and needs to be replaced. The State Route 162 is a crucial route of transportation across the Sacramento River and would cause significant hardship for the public, including Refuge visitors, if it were closed during replacement. While construction of the viaduct would permanently remove 3 acres of volunteer oak woodland and 2.73 acres of pavement and weedy annual grassland, the loss of this habitat would not materially interfere with the purposes of the Refuge. In addition, the 5.73 acres of Refuge land will be exchanged for approximately 22 acres of restored riparian vegetation and the temporary construction easement will be restored to native grasses. Therefore, the Service believes that granting the right-of-way would result in a net increase in riparian habitat on the Refuge as well as uninterrupted access for wildlife dependent recreation.

#### **References:**

State of California, Department of Transportation. Initial Study with Mitigated Negative Declaration/Section 4(f) De Minimis Determination for the Butte City Bridge Project. Glenn County, California. April 2019.

Signature Page:	
Refuge Manager:	
Regional Chief: _	